

Rec'd IN/PTO

18 JAN 2003

10/522377

PTO/SB/01 (09-04)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**



Declaration
Submitted
With Initial
Filing

OR



Declaration
Submitted after Initial
Filing (surcharge
(37 CFR 1.16 (e))
required)

Attorney Docket
Number

P5085/Psm

First Named Inventor

HAN, Gun-Hee et al.

COMPLETE IF KNOWN

Application Number

Filing Date

Art Unit

Examiner Name

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Time-Interleaved Band-Pass Delta-Sigma Modulator

(Title of the Invention)

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

08/29/2002

as United States Application Number or PCT International

Application Number

PCT/KR2002/001623

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
2002-0048362	Korea	08/16/2002	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance completing the form, call 1-800-PTO-9199 and select option 2.

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DECLARATION**ADDITIONAL INVENTOR(S)
Supplemental Sheet**Page 3 of 3**Name of Additional Joint Inventor, if any:**☐

A petition has been filed for this unsigned inventor

Given Name (first and middle (if any))

Family Name or Surname

Jung-Yoon

LEE,

Inventor's
Signature*Jungyoon Lee*01-05-2005
Date

Seoul

Residence: City

State

Republic of Korea
CountryKorea
CitizenshipB725 The Second Department of Engineering, Yonsei University,
Sinchon-Dong, Seodaemun-Gu, ,

Mailing Address

Seoul
City

State

120-749
ZipRepublic of Korea
Country**Name of Additional Joint Inventor, if any:**☐

A petition has been filed for this unsigned inventor

Given Name (first and middle (if any))

Family Name or Surname

Inventor's
Signature

Date

Residence: City

State

Country

Citizenship

Mailing Address

City

State

Zip

Country

Name of Additional Joint Inventor, if any:☐

A petition has been filed for this unsigned inventor

Given Name (first and middle (if any))

Family Name or Surname

Inventor's
Signature

Date

Residence: City

State

Country

Citizenship

Mailing Address

City

State

Zip

Country

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DECLARATION — Utility or Design Patent Application

Direct all correspondence to: ☐ The address associated with Customer Number: OR ☒ Correspondence address below

Name

Peter T. Kwon

Address

Kangnam P.O. Box 2301

City

Seoul

State

ZIP

135-242

Country

Republic of Korea

Telephone

82-11-415-6349

Fax

82-2-581-9900

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR:☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])

Gun-Hee

Family Name or Surname

HAN,

Inventor's Signature



Date

01-05-2005

Residence: City

Goyang,

State

Gyeonggi

Country

Republic of Korea

Citizenship

KRX Korea

Mailing Address

2414-302 Hatbit Village, Haengsin-Dong, Dukyang-Gu,

City

Goyang,

State

Gyeonggi

Zip

412-220

Country

Republic of Korea

NAME OF SECOND INVENTOR:☐ A petition has been filed for this unsigned inventor

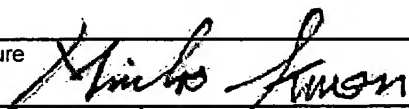
Given Name (first and middle [if any])

Min-Ho

Family Name or Surname

KWON,

Inventor's Signature



Date

01-05-2005

Residence: City

Seoul

State

Country

Republic of Korea

Citizenship

KRX Korea

Mailing Address

B725 The Second Department of Engineering, Yonsei University,
Sinchon-Dong, Seodaemun-Gu,

City

Seoul

State

Zip

120-749

Country

Republic of Korea

☐ Additional inventors or a legal representative are being named on the _____ supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant, Patentee or Identifier: HAN, Gun-Hee et al.

Application or Patent No.:

Filed or Issued Date:

Title: Time-interleaved band-pass delta-sigma modulator

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY
STATUS (37 CFR 1.9(f) and 1.27(b)) - INDEPENDENT INVENTOR**

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled Time-interleaved band-pass delta-sigma modulator and described in

- ☒ the specification filed herewith with title as listed above.
☐ the application identified above
☐ the Patent identified above.

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:


- ☒ No such person, concern, or organization exists.
☐ Each such person, concern, or organization is listed below.

Separate statements are required from each named person, concern or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.


HAN, Gun-Hee
Name of Inventor


Signature

01/12/2005
Date

KWON, Min-Ho

Name of Inventor



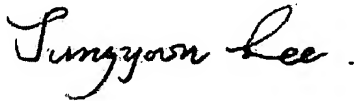
Signature

01/12/2005

Date

LEE, Jung-Yoon

Name of Inventor



Signature

01/12/2005

Date

Name of Inventor

Signature

Date

Name of Inventor

Signature

Date

Name of Inventor

Signature

Date

Rec'd USPTO

18 JAN 2006

10/522373

PTO/SB/81 (09-04)

Approved for use through 11/30/2005. OMB 0651-0035
U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM	Application Number	
	Filing Date	
	First Named Inventor	HAN, Gun-Hee et al.
	Title: Time-Interleaved Band-Pass Delta-Sigma Modulator	
	Art Unit	
	Examiner Name	
	Attorney Docket Number	P5085/Psm

I hereby appoint:

☐ Practitioners associated with the Customer Number 000041943

OR

☒ Practitioner(s) named below

Name	Registration Number
Peter T. Kwon	45,300

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☐ The address associated with the above-mentioned Customer Number.

OR

☐ The address associated with Customer Number

OR

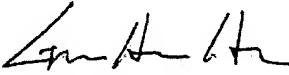
<input checked="" type="checkbox"/> Firm or Individual Name	G W i P S				
Address	Kangnam P. O. Box 2301,				
City	Seoul	State		Zip	135-242
Country	Republic of Korea				
Telephone	82-11-415-6349	Fax	82-2-581-9900		

I am the:

☒ Applicant/Inventor.

☐ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Signature		Date	01/12/2005
Name	HAN, Gun-Hee		Telephone
Title and Company	Professor, Yonsei University		

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ Total of 2 forms are submitted.

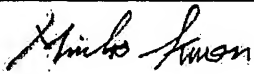
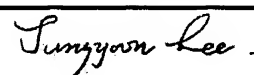
This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents P.O. Box 1450, Alexandria, VA 22313-1450.

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POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM	ADDITIONAL INVENTORS	
	Supplemental Sheet	
	First Named Inventor	HAN, Gun-Hee et al.
	Attorney Docket Number	P5085/Psm
Title: Time-Interleaved Band-Pass Delta-Sigma Modulator		

SIGNATURE of Second Inventor			
Signature		Date	01/12/2005
Name	KWON, Min-Ho	Telephone	
Title and Company	Professor, Yonsei University		
SIGNATURE of Third Inventor			
Signature		Date	01/12/2005
Name	LEE, Jung-Yoon	Telephone	
Title and Company	Professor, Yonsei University		
SIGNATURE of Fourth Inventor			
Signature		Date	
Name		Telephone	
Title and Company			
SIGNATURE of Fifth Inventor			
Signature		Date	
Name		Telephone	
Title and Company			
SIGNATURE of Sixth Inventor			
Signature		Date	
Name		Telephone	
Title and Company			
SIGNATURE of Seventh Inventor			
Signature		Date	
Name		Telephone	
Title and Company			

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): HAN, Gun-Hee et al.
Int'l Application No.: PCT/KR2002/001623
Int'l Filing Date: August 29, 2002
For: Time-Interleaved Band-Pass Delta-Sigma Modulator

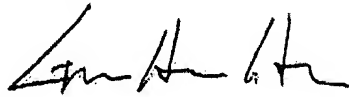
Examiner: Unknown
Group Art Unit: Unknown

DECLARATION OF APPLICANT

I/We, the undersigned applicant(s) in the above-identified application, declare as follows:

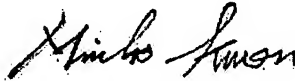
The substitute specification for the above-identified application is voluntarily filed to correct the obvious errors, which were contained in the PCT original specification. In accordance with the requirement of 37CFR §1.125(b) applicants declare that NO NEW MATTER is contained in the substitute specification.

I/We have been advised and am aware that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statement may jeopardize the validity of the application or any patent resulting there from.



HAN, Gun-Hee

Date: 01/12/2005



KWON, Min-Ho

Date: 01/12/2005



LEE, Jung-Yoon

Date: 01/12/2005